

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



# TECHNICAL NOTES

LAKE STATES FOREST EXPERIMENT STATION  
UNIVERSITY FARM ST. PAUL, MINNESOTA

## Effectiveness of Soil Scarification in Promoting Jack Pine Reproduction

In developing management practices for jack pine, great stress has been laid on the necessity of scarifying the ground surface in order to get successful natural reproduction. Some recent jack pine cuttings on the Chippewa National Forest provide data which indicate once again how effective scarification can be.

Reproduction quadrats were established in a jack pine stand cut in the fall of 1937. The ground was scarified completely, but of course there were many small spots missed. When the reproduction quadrats were established, some fell on ground completely scarified and some on ground that had been missed altogether, and some on in-between conditions.

The relation between degree of scarification and number of seedlings is shown in the following table. The number per acre includes both 1938 and 1939 seedlings.

Percent scarified	Total quadrats	Number of seedlings per acre
0	44	45
10 and 20	42	405
30 and 40	42	1,285
50 and 60	23	2,260
70 and over	6	5,835

The advantage of as complete scarification as possible is very apparent.

No. 161

May 1940

Assistance in the preparation of this material was furnished by the personnel of Work Projects Administration, O.P. 665-71-3-69, Sponsor, University of Minnesota, and O.P. 01-2-71-126, Sponsor, Lake States Forest Experiment Station.

